Before the Federal Communications Commission Washington, DC 20554

In the Matter of: Revision of Part 15 Rules of the Commission's Rules Regarding Ultra-Wideband Transmission Systems

ET Docket No. 98-153

Comments of Lee Slater, PhD

Lee Slater, PhD, submits these comments in response to the Notice of Proposed Rule Making (NPRM), FCC 00-163, and the request for comments on testing (performed by NTIA and others) in the proceeding referenced above. These comments address the most recent submissions provided to the FCC under this docket, including recommendations and conclusions made in submissions by others suggesting continued rule making in this proceeding and proposed changes to Part 15 rules.

As a researcher and teacher in applied geophysics I wish to express my great concern regarding the proposed severe restrictions on the use of electromagnetic devices in the frequency range of 100 Hz-3.1 Mhz. The applied geophysics methods, including the electromagnetic induction (100 kHz – 1000 kHz) and ground penetrating radar (1 MHz – 3 GHz) techniques are EXTREMELY valuable tools for investigating the subsurface. I find it inconceivable that restrictions on the use of these techniques be mandated on the basis of improbable interference with GPS data, radio communication, or computer data links, etc.

For decades the applied geophysics community has been intensively using such methods to assist in mineral exploration, evaluation of groundwater resources, geological mapping, contaminant delineation, unexploded ordinance detection, archaeological mapping and forensic investigations (and a great deal more). I cannot recall ever hearing of a case where a geophysical instrument was shown to cause radio interference. These techniques offer an extremely valuable, inexpensive approach to investigating the subsurface. The geophysical community offers a unique service to industry, federal programs, state departments and local communities. I therefore find it deplorable to think that these methods will be regulated when any interference caused by these instruments is unlikely.

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